Agenda Date: 3/16/06 Agenda Item:1C



STATE OF NEW JERSEY

Board of Public Utilities Two Gateway Center Newark, NJ 07102 www.bpu.state.nj.us

CLEAN ENERGY

IN THE MATTER OF UTILITY DISTRIBUTED ENERGY RESOURCES PILOT PROJECT - RELEASE OF GRANT SOLICITATION

ORDER

DOCKET NO. E006020099

(ATTACHED SERVICE LIST)

BY THE BOARD¹

On February 9, 1999, the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et seq., (EDECA or Act) was signed into law. The Act established requirements to advance energy efficiency and renewable energy in New Jersey through the societal benefits charge (SBC) at N.J.S.A. 48:3-60a(3). By Order dated December 23, 2004, Docket No. EX04040276, the Board approved the 2005 energy efficiency and renewable energy programs and budgets. On December 23, 2005 the Board approved the continuation of the 2005 programs and budgets as the preliminary 2006 programs and budgets, with the expectation that final 2006 programs and budgets would be submitted to the Board for review in early 2006.

As part of an initiative overseen by the U. S. Department of Energy and the State Technology Advancement Collaborative (STAC) to explore ways to promote utility company investment in energy efficiency and clean distributed generation, the National Association of State Energy Officials (NASEO) issued a solicitation to state energy offices and state-chartered institutions. As more fully set forth below, the Board responded to this solicitation with a project proposal, consistent with the NASEO grant requirements. One of these requirements was that the grant recipient provide matching funds of at least 55 percent of the total project costs. Accordingly, the Board's proposal incorporated up to \$1 million in state matching funds, to be provided through the Clean Energy Fund. As discussed below, the Board received one of the federal grants administered by NASEO in the amount of \$300,000. Staff now recommends that the Board, in accordance with its grant proposal submitted to NASEO, release its own grant solicitation to New Jersey electric utilities in order to further its proposed project and to involve New Jersey utilities in deploying clean, efficient and cost effective distributed energy and demand response resources (DER) within congested areas of their service territories. Deployment of these resources are expected to provide New Jersey ratepayers with energy

¹ Commissioner Connie O. Hughes recused herself on this matter due to a potential conflict of interest.

cost savings, as well as substantial environmental and public health benefits, while helping to preserve our natural resources. Deployment of DER may also reduce the need to construct conventional electricity infrastructure, while improving overall system reliability. This project will also evaluate and test the ability of distribution companies within New Jersey to capture these values.

Procedural History and Discussion

On July 9, 2003, the State Technology Advancement Collaborative issued a solicitation entitled "Energy Efficiency Research, Development, Demonstration and Deployment Projects" (STAC Solicitation). NASEO administered the STAC Solicitation on behalf of the STAC Executive Committee. The primary objective of the STAC solicitation was to provide funds in support of joint energy research, development, demonstration, and deployment (RDD&D) of technologies where common federal and state objectives exist. Another important goal of the solicitation was to facilitate projects that would result in the dissemination of results and the transfer of technology on as broad a basis as possible.

The New Jersey Board of Public Utilities was awarded the grant from the STAC in the amount of \$300,000 for its proposal, entitled, "Distributed Energy Infrastructure Analysis and Pilot Project for New Jersey and Pennsylvania Targeted in the Small and Medium Sized Commercial and Industrial Sectors." The objective of the proposal is to evaluate the baseline of existing DER for all market segments and the financial, regulatory and technical barriers to expanding DER in New Jersey and Pennsylvania. This baseline evaluation will frame the issues that policy makers will need to address in the immediate future in order to overcome existing and future barriers for DER. This data will permit the Board's Office of Clean Energy (OCE) to develop a policy manual to facilitate the expansion of DER in the target commercial and industrial sectors. This expansion will ultimately be accomplished through a pilot project that demonstrates effective incentives for several DER technologies and tools, and deploys these technologies and tools within the small to medium commercial sectors in selected load constrained areas in New Jersey and Pennsylvania. The grant solicitation is directed to electric distribution utilities because these entities own and control the distribution networks that will be central to the successful implementation of a DER pilot project. Accordingly, electric utilities will have to act as partners with the Board by incorporating distributive energy resources into their overall distribution systems in an effective manner.

Pursuant to its project proposal, the Board has assembled a project team consisting of the OCE, Pennsylvania Department of Environmental Protection, the National Association of Regulatory Utility Commissioners (NARUC), the Center for Energy, Economic and Environmental Policy, Rutgers University (CEEEP), Madison Energy Consultants (MEC) and the National Council on Electricity Policy (NCEP). The project team, funded with the STAC grant, is presently analyzing the current status of resources and policies, as well as the financial, regulatory and technical barriers regarding DER in the two states. In addition, one or more pilot projects (the subject of this solicitation) will be conducted in New Jersey. Based on the results of the analysis and the pilot project(s), policy recommendations will be made to the Board regarding the future of DER in New Jersey. Project results will be shared with the Board's project team partners, as well as appropriate regional stakeholder groups (e.g. the Mid Atlantic Demand Response Initiative), and will be disseminated nationally.

OCE calculates that the pilot project may incur costs of up to \$1 million over the life of the project. Staff therefore recommends that the Board issue the attached grant solicitation to all

New Jersey's electric utilities and direct that it be posted on the Board's website. Grant applicants will be asked to submit a total project budget and a plan for rate treatment for the expenditures (if any) that exceed the \$1 million available from the Clean Energy Program. MEC and CEEEP will work with the successful bidder to implement a load management/distributed resources project that addresses grid congestion, uses innovative technology, incorporates PJM Demand Response Programs, offers innovative incentive and rate treatment approaches and explores the creation of sustainable business models to expand the pilot beyond the scope of the STAC project.

Staff recommends that proposals be reviewed by a committee comprised of Board Staff, the U.S. Department of Energy (USDOE), the New Jersey Department of Environmental Protection (NJDEP), and the Pennsylvania Department of Environmental Protection (PADEP). The proposals will be reviewed according to the following criteria:

- The comprehensiveness of the applicant's detailed approach and plans, as well as the likelihood of success. Proposals will be judged according to their approach in addressing each of the three project goals below.
 - 1. Determining whether DER can bring value to the electric grid and the local grid operator. Some of these potential values include enhanced reliability, lower construction budgets and increased operating flexibility;
 - 2. Demonstrating a business model that allows capture of multiple DER values by one or more entities;
 - 3. Developing short and longer term regulatory approaches that facilitate the deployment of cost effective DER in New Jersey.
- The adequacy of procedures for identifying and targeting "congested" areas within the company service territory.
- The applicant's procedures for calculating the value of DER as an alternative to other
 utility construction projects. The applicant should submit its proposed cost effectiveness
 test and show how potential projects will be evaluated according to the cost
 effectiveness test.
- The amount of distributed resources to be deployed in the pilot project.
- The amount of in-kind resources and other cost sharing by the applicant.
- The applicant's plans to evaluate project results and incorporate successes into ongoing company operations, particularly into planning and operations departments of the company.
- Whether a sustainable business model can be developed from the approach suggested by the applicant in its project plan, and whether the project can be replicated by other New Jersey distribution utilities.
- The applicant's demonstrated knowledge of PJM, its structure and pricing, as well as its plans for utilizing PJM Load Response programs as part of the pilot.
 - The adequacy of the applicant's plans for working collaboratively with Board Staff and the STAC Project Team to implement the Project
 - The applicant's documented experience with projects of similar size and scope.

Conclusion

Upon consideration of the foregoing, the Board <u>HEREBY APPROVES</u> the Release of the Grant Solicitation for a New Jersey Clean Energy Utility Distribution Energy Resources Pilot Project, as set forth above. The Board further <u>ORDERS</u> that Board Staff, seek the participation of NJDEP, PADEP and USDOE in determining and recommending the grant recipient, and that Staff present same to the Board for approval.

DATED: 3/22/06

BOARD OF PUBLIC UTILITIES BY:

JEANNE M. FOX PRESIDENT

FREDERICK F. BUTLER

COMMISSIONER

OSEPH L. FIORDALISO COMMISSIONER

CHRISTINE V. BATOR COMMISSIONER

ATTEST:

KRİSTI IZZO SECRETARY I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public

Utilities

Notice of Availability of Grant Solicitation

New Jersey's Clean Energy Program Utility Distributed Energy Resources Pilot Project Grant Solicitation

The NJ BPU Clean Energy Office hereby announces the availability of the following grant program:

Name of program:

Utility Distributed Energy Resources Pilot Project Grant Solicitation

SECTION ONE-INTRODUCTION

Purpose:

The New Jersey Utility Distributed Energy Resources Pilot Project Grant Solicitation is funded through the New Jersey Board of Public Utilities, Office of Clean Energy. The Grant Solicitation is part of a larger project funded by a grant from the State Technologies Advancement Collaborative (STAC). The objective of the grant solicitation is to involve New Jersey utilities in deploying clean, efficient and cost effective distributed energy and demand response resources (DER)² within congested areas of their service territories. Deployment of these resources may be able to provide New Jersey ratepayers with energy cost savings and offer substantial environmental and public health benefits while helping preserve our natural resources. Deployment of DER may reduce the need to add conventional power plants and transmission facilities while improving overall system reliability. This project will test the ability of distribution companies within New Jersey to capture these values.

Goals:

The NJBPU is interested in receiving proposals from Local Electric Distribution Companies (LDCs or "utilities") in New Jersey for project(s) that will meet the objectives of the New Jersey/Pennsylvania STAC project, <u>Distributed Energy Infrastructure</u>

<u>Analysis and Pilot Project for New Jersey and Pennsylvania Targeted in the Small and Medium Sized Commercial and Industrial Sectors.</u> The goals of the project are to:

• Determine if distributed energy resources (DER) can bring value to the electric grid and the local grid operator. Some of these potential values include enhanced reliability, lower construction budgets and increased operating flexibility.

¹ Information about STAC can be found at: http://www.stacenergy.org/about/index.htm

² Distributed Energy Resources (DER) are defined as a combination of devices that *reduce the demand* for electricity ('demand side' resources), devices that allow energy use to be shifted to another time (storage resources) and equipment (20 Mw and smaller) used to generate electricity near the point of use ('supply-side' resources).

Demonstrate a business model that allows capture of multiple DER values by one or more entities.

• Develop short and longer term regulatory approaches that facilitate the deployment of cost effective DER in New Jersey.

Description of goals:

• Goal One: Determine if distributed energy resources (DER) can bring value to the electric grid and the local grid operator.

There are numerous efforts around the country (California, New York, Massachusetts, MADRI, etc.) to determine if DER can benefit local electricity consumers by reducing the costs and increasing the reliability of distribution service. A number of these efforts have identified the issues and approaches that can be used to determine if DER provides a cost effective alternative to utility construction, and if so, what are procedures to quantify that value. Efforts in California and Massachusetts are referenced below. While these efforts are underway to identify potential uses of DER within the electric grid, there are difficulties and technical issues to resolve, as well as a lack of experience with integrating DER into the utility planning process and grid operations.

Utilities have not used DER as a tool because of unknowns relating to predictability, dispatchability, control, size of potential resources relative to the need, cost and technology reliability. Utility planners and operators who are responsible for keeping the lights on for all customers have limited experience utilizing customer owned generating equipment or demand response for meeting the needs of the electric grid. A number of legitimate questions arise such as;

- 1. What happens if a customer changes his mind about curtailing load and wants to use facilities that were not built? What if the customer who agreed to curtail his load leaves and another full service customer takes his place?
- 2. What if the promised demand response, energy efficiency improvements or distributed generation fails to come on line according to schedule?

Massachusetts DG Collaborative: Distribution Planning Work Group. Presentations and meeting summaries of the Group are available at: http://www.masstech.org/renewableenergy/public_policy/DG/resources/DistributionPlanningWorkingGroup.htm

³ A report on a project at Southern California Edison to design an RFP seeking DG resources to replace utility construction projects can be found at: http://www.epri.com/der-pp/California DER Pilot Project.html

- 3. What happens when load growth continues and DER can not handle the next increase in load?
- 4. What happens if the distributed generation unit fails to operate when needed?
- 5. Who becomes responsible for maintaining electric network reliability when the utility no longer controls all network operations?
- 6. What is the value of deferring or avoiding a distribution project if DER is installed rather than traditional utility wires, poles and substations?

One goal of this project is to begin to answer these and related questions while developing solutions, best practices and recognized limitations of DER based approaches. Utilities responding to this grant solicitation will be encouraged to integrate the analysis and consideration of DER solutions into their company planning and operational processes. Many of the technical questions regarding the use of DER within utility operations can be answered once DER is installed and becomes a resource for utility use.

Goal Two:
 Demonstrate a business model that allows capture of multiple DER values by one or more entities.

As a result of the industry restructuring that followed the passage of EDECA, the traditional generation, transmission and distribution functions of utilities have been separated into three separate business organizations. Consequently, it has been difficult to capture all of the various values that DER can provide to the electric enterprise. For example, although the distribution utilities in the State operate a direct load control program that reduces peak capacity and energy costs, the benefits of these reductions accrue to the BGS suppliers in New Jersey rather than to the distribution utilities. Consequently, there is no incentive for the local distribution utility to aggressively market the program since they do not directly benefit from it.

A new business model is needed that allows entities to capture the value of DER and be compensated (make money) for the risk assumed and the resources invested. The grant solicitation will be seeking responses from distribution utilities for their ideas and approaches for bringing the DER value chain back together in New Jersey. One possible approach could include a closer involvement of the distribution utilities in the deployment and operation of distributed resources where that brings value to ratepayers. A second approach may be for the utility to become involved in aggregating demand resources that are customer owned, managing the dispatch and sale of the demand resources in the wholesale market.

One of the questions that arise in the consideration of new business models involves the role of utilities in the deployment of DER. Should DER be considered a competitive service that should be provided only by third parties, or is the deployment of DER more effectively considered as part and parcel of the distribution business? If DER is closely integrated into the planning and operation of the distribution grid, the appropriate role of the distribution utility may be very different than in the scenario where customer values (backup reliability, reduced total energy costs, etc.) are the primary force motivating the

deployment of DER. One of the goals of this project is to examine the potential value that DER can bring to the grid if utilities begin to understand and use DER to reduce their construction expenditures and improve local reliability. The business model that is developed to facilitate this utility role in DER should also allow a place for non-utility deployment of DER.

• Goal Three: Develop short and longer term regulatory approaches that facilitate the deployment of cost effective DER in New Jersey.

The regulatory model used in New Jersey today discourages utilities from using DER as alternatives to their traditional wires, poles and substation solutions for two reasons. In the first place, the rate base (from which earnings are derived) increases when utility investments are made but not when customer DER investments are made. Secondly, when customers install DER at their sites, they reduce the amount of electricity that they purchase from the local utility (known as the throughput disincentive). These lower sales result in lower profits for the utilities.

Several long term solutions have been suggested to mitigate these disincentives. For example, an alternative approach for rate making is to establish a per-customer revenue allotment (subject to periodic adjustment and service performance standards.) based on historic and projected costs. This approach gives the utility an incentive to provide reliable service at least cost. If they can reduce their costs by encouraging energy efficiency, clean distributed generation or demand response, their earnings go up rather than down since revenues stay the same and costs go down.

While alternative long term approaches such as the one above are being explored during the STAC project, there is also a need to develop near-term regulatory approaches that will allow distribution utilities to explore the use of DER while not impacting their operational or financial well-being. One goal of the STAC project is to establish one or more models that will enable the use of DER in the electric enterprise on a pilot basis so some of these technical, business and regulatory issues can be worked through in a real project with equipment, customers and utility operators all involved.

Description of STAC Project⁴

In early 2005, the New Jersey Board of Public Utilities was issued a grant award from the State Technology Advancement Collaborative (STAC) entitled, Distributed Energy Infrastructure Analysis and Pilot Project for New Jersey and Pennsylvania Targeted in the Small and Medium Sized Commercial and Industrial Sectors.

The project team is in the midst of analyzing the current status of resources and policies, as well as the financial, regulatory and technical barriers regarding distributed energy resources (DER) in the two states. In addition, one or more pilot projects (the subject of

⁴ A more extensive description of the STAC project can be found at: http://www.stacenergy.org/projects/03-STAC-01/default.htm#Distributed%20Energy%20

this solicitation) will be conducted in New Jersey. Based on the results of the analysis and the pilot project(s), policy recommendations will be made to the New Jersey Board of Public Utilities regarding DER. Project results will be shared with the Pennsylvania state partners; appropriate regional stakeholder groups (i.e. MADRI) and will be disseminated nationally.

In addition to the Office of Clean Energy in the NJBPU, other project partners include the following:

Pennsylvania Department of Environmental Protection, Office of Energy (PADEP)
National Association of Regulatory Utility Commissioners (NARUC)
Center for Energy, Economic and Environmental Policy, Rutgers (CEEEP)
Madison Energy Consultants (MEC)
National Council on Electricity Policy (NCEP)
PJM

The project team is led by MEC with assistance from CEEEP. The NJBPU is issuing this Grant Solicitation to seek innovative responses from New Jersey utilities that create collaborations with technology providers, installation contractors and customers. The utilities will be offered the opportunity to implement a pilot deployment of distributed energy resources using \$1 million from the New Jersey Board of Public Utilities Clean Energy Fund. The total project cost is likely to exceed the \$1 million available from the Clean Energy Program since a primary goal of the project is to deploy a quantity of DER large enough so that it can be used to defer or avoid one or more construction projects or improve reliability in the distribution grid. Since utility upgrades are normally driven by load growth increments in the 2-20 MW range, the STAC project will likely involve DER deployments in the same size range.

Applicants for the grant will be asked to submit a total project budget and submit a plan for rate treatment for the expenditures (if any) that exceed the \$1 million available from the Clean Energy Program.

MEC and CEEEP will work with the successful bidder to implement a load management/ distributed resources project that addresses grid congestion, uses innovative technology, incorporates PJM Demand Response Programs, offers innovative incentive and rate treatment approaches and explores the creation of sustainable business models to expand the pilot beyond the scope of the STAC project. An implementation team consisting of the winning applicant, MEC, CEEEP and Board Staff, will be formed to monitor the winning bidder's implementation of the project goals, attainment of results and dissemination of information to non-participants. The implementation team will recommend how the results from the pilot can be incorporated into regional energy policies.

The project is expected to demonstrate the use of various technologies involving clean distributed generation and other technologies that facilitate customers' ability to control their use of electricity during high peak price periods.

This solicitation is seeking proposals from distribution utilities that are willing to explore the feasibility of incorporating distributed resources (either utility or customer owned) into the normal operations of their company. Since this is not done today, there is a need for a pilot project to explore the technical, business, regulatory and organizational issues inherent in this change in business practice. Numerous studies have indicated that the increased use of distributed resources can reduce overall grid expansion and operational costs and potentially increase grid reliability. Most of those studies have been theoretical - there is a need for a project to determine if those theoretical benefits can actually be realized by a grid operator. The purpose of this solicitation is to select one or more utility submitted projects that can help answer these questions.

<u>SECTION TWO- GRANT SOLICITATION</u> <u>PROCESS</u>

Amount of funds available in the program:

Up to a total of \$1,000,000 in Clean Energy Funds is available as an incentive for a utility that is selected as a result of this solicitation.

Entities which may apply for funding under the program:

New Jersey electric distribution utilities regulated by the NJBPU.

Qualifications needed by an applicant to be considered for the program:

Applicants for Funding must have staff and resource capability and expertise as well as a willingness to work with the STAC Project Team (Madison Energy Consultants and CEEEP-Rutgers) to implement the project.

Description of grant award process:

The NJ BPU will select one or more of the respondents to the Grant Solicitation to engage in negotiations leading to a final program plan, budget and rate recovery proposal. The final program plan will be submitted to the BPU Commissioners for their consideration and approval. The project will not begin until a final order is issued by the Board to approve the project(s).

Judging Criteria

Proposals will be reviewed and scored by a Grant Review Committee according to the following criteria:

- The comprehensiveness of the applicant's detailed approach and plans as well as the likelihood of success. Proposals will be judged according to their approach in addressing each of the three project goals below.
 - O Goal #1-Determine if distributed energy resources (DER) can bring value to the electric grid and the local grid operator. Some of these potential values include enhanced reliability, lower construction budgets and increased operating flexibility.

- O Goal #2- Demonstrate a business model that allows capture of multiple DER values by one or more entities.
- O Goal #3- Develop short and longer term regulatory approaches that facilitate the deployment of cost effective DER in New Jersey.
- Procedures for identifying and targeting "congested" areas within the company service territory.

Applicant's procedures for calculating the value of DER as an alternative to other utility construction projects. The applicant should submit their proposed cost effectiveness test and show how potential projects will be evaluated according to the cost effectiveness test.

Amount of distributed resources to be deployed in the pilot project.

In-kind resources and other cost sharing by the applicant.

- Plans to evaluate project results and incorporate successes into ongoing company operations, particularly into planning and operations departments of the company
- Can a sustainable business model be developed from the approach suggested by the applicant in their project plan? Can the project be replicated by other New Jersey distribution utilities?
- The respondent's demonstrated knowledge of PJM, its structure and pricing as well as plans for utilizing PJM Load Response programs as part of the pilot.
- Plans for working collaboratively with Board Staff and the STAC Project Team to implement the Project
- Documented experience with projects of similar size & scope,

Qualifications & experience of key personnel

Length of Potential Projects:

Installation of DER equipment, operation throughout a minimum of one summer and submission of final report should be completed within sixteen months of project initiation. Continued operation of DER equipment is expected to continue beyond the end of the sixteen month STAC project.

No Regulatory Precedent to be Set:

This project will not set a precedent that either the Board of Public Utilities or any respondents to the Solicitation will be required to continue beyond the term of the pilot as agreed in the Final Order.

SECTION THREE- GRANT APPLICATION

TASK DESCRIPTIONS

There should be a listing of the tasks of the project. Each task should be assigned a number which is keyed to the task number that is used in the Task Description and Project Budget sections.

- Each task should be described in detail, with separate paragraphs including: objective, discussion of the specifics of the tasks, and the deliverables to result from that task.
- If any entity other than the applicant (for example, consulting firm, subcontractor or other agency) will be conducting a portion of the work that must be so specified in the task descriptions.

SCOPE OF WORK

I. INTRODUCTION

There should be a brief description of the project, its goals and the objectives of the company in participating in the project.

II. BUSINESS MODEL FOR PROJECT

Describe the expected revenues from the project and their source. Describe the project's business model, including the following elements;

A. Marketing Plan

Provide a description of the marketing plan that will be used to recruit participants. Describe how customers will be contacted, eligibility for participation, and how customers will be selected/rejected for participation.

B. Who Will Own and Operate the Equipment

Where will the equipment be located, who will own the equipment, who will control its operation and maintenance, who will decide when and how the resource will be dispatched for distribution reliability purposes, who and how will the equipment be used to respond to high LMP conditions in the local area?

C. How Resources Will Be Used in the PJM Wholesale Programs and Markets

Describe if and how wholesale capacity value will be captured within the PJM market. Describe if and how resources will be used in the PJM emergency and economic Demand Response Programs. Present a diagram

showing how payments under these programs will flow from and to the various parties to the transactions.

D. Project Rate Treatment

There should be a section that discusses how the applicant would desire the investment of non-CEP funds, including capital, labor and materials necessary to achieve the Project objectives, be treated for rate making purposes. The ultimate determination of the project's rate treatment will be contained in the final Board order for the project.

E. Use of Clean Energy Funds

The applicant should indicate how up to \$1,000,000 in Clean Energy Program (CEP) funds will be used during the project. Applicants should suggest uses of the CEP funds that are consistent with the overall goals and objectives of the CEP and will promote the development of a more efficient electricity delivery system.

F. Role of Non-Affiliated Third Party Vendors and Contractors

How will non-affiliated vendors and contractors participate in the project.

G. Use of existing demand response resources and customer generation within the pilot.

Describe if and how existing demand side resources such as the residential air conditioner control switch program will be integrated into the STAC project, both technically and from a rate making perspective.

III. DESIGN AND OPERATIONS

Target Area

Since the purpose of the STAC pilot is to determine how to target DER investment into those areas of the distribution and transmission grid where it can bring the most value to ratepayers, each applicant should identify the process they will use to identify eligible areas of their service territories for this project. How will the applicant coordinate their selection of target areas with PJM? Will there be overlap between the applicant's target areas and PJM identified transmission constrained areas? If potential target areas have been identified, they should be included in the applicant's response.

Determination of Cost-Effectiveness

Provide a description of the process that will be used to determine the cost-effectiveness of DER installations as alternatives to traditional wire and pole solutions. How will deferral value be calculated and/or how will DER's contribution to enhanced reliability be measured. How will DER solutions for this pilot be compared to non-DER solutions

Description of Technology to Be Used

Provide a description of the DER equipment to be used. If generating equipment is to be used, provide a description of the emission control technology to be used and how New Jersey air permitting requirements will be met. Provide a permitting approach and time line. If demand response equipment such as load cycling equipment is to be used, provide information on potential products that will be considered.

Scale of the Project

Provide an estimate of the megawatts of distributed resources that are likely to be deployed during the project and the basis for the estimate.

How DER Installed During Project Will Be Used to Improve Grid Reliability and Operations

One of the project goals is to determine how DER can add value to the distribution system planning and operations. The applicant should address how they plan to test the ability of DER to displace other utility construction expenditures and/or improve reliability. Plans to incorporate DER into utility reliability planning and operations should also be addressed.

Use of DER After Completion of STAC Project

The applicant should describe plans to utilize the resources after the project is completed. Plans for rate treatment of DER equipment that is retired, relocated or maintained for ongoing operation should all be included in the applicant's response.

1V. PROJECT TEAM AND EXPERIENCE

Who will be the people dedicated to the project and what is their experience with similar projects. Estimate the number of hours to be devoted to the project by key people.

V. PROGRESS REPORTING AND METRICS FOR EVALUATION

An explanation of how the proposed work will be evaluated for effectiveness along with appropriate metrics should be included. At a minimum, there should be quarterly progress reports, a comprehensive twelve month progress report and a final report included in the evaluation and reporting plan.

PROJECT BUDGET

There should be a brief introductory discussion regarding the total project cost, including budget estimates for equipment. The applicant should indicate how the \$1,000,000 in Clean Energy Funds (CEF) will be used during the project and how

the CEF funds will be accounted for independently from other project expenditures. Any additional project costs for capital and O&M that will not be covered by the Clean Energy Program funding should be included, followed by a table providing the following information:

- The cost for each task must be specified and there must be a breakdown of how that cost was derived including labor and cost of materials or services.
- Staff time must be specified by title of each person to work on the task and their cost based on the number of hours to be worked on the task multiplied by their hourly rate. All calculations must be shown.
- Other costs (for example, consultant, specific supplies, and travel) must also be included.
- Cost for equipment should be included.
- Any sub-contract services or activities must be identified in the budget. Any sub-contract arrangements must be identified in the response.

PROJECT SCHEDULE

The proposal should provide a work schedule showing key tasks and milestones for the proposed project from the point a Board Order is issued through project completion. Include a schedule item for each significant project development and implementation activity. Indicate actions to be taken to ensure the schedule will be met.

A "time line" should be included. Month names should not be specified; but, instead, they should be listed by number (that is, from 1 to 16 since this is a 16 month project)

SECTION FOUR- GRANT SUBMITTAL

Address for submitting applications:

Grant applications should be submitted in triplicate with an electronic copy in MS Word format to:

New Jersey Board of Public Utilities Office of Clean Energy 2 Gateway Center Newark New Jersey 07102 Attn: Mona Mosser mona.mosser@bpu.state.nj.us

Deadline	by which	h applica	ations m	ust be	submitted:
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Complete proposals must be received by _____ (Submittal Deadline) [45 days from release of solicitation - date to be added when available]

Date by which applicants shall be notified of approval or disapproval:

Applicants will receive notice of preliminary approval or disapproval, pending further project review, of the Utility Distributed Energy Resources Pilot Project Grant within twenty one (21) days from the Submittal Deadline.